STATE OF KANSAS
DEPARTMENT OF HEALTH AND ENVIRONMENT

ANNUAL DRINKING WATER REPORT
FOR 1997
~ SUMMARY ~

JUNE 1998

BILL GRAVES, GOVERNOR
Gary Mitchell, Secretary
Ronald Hammerschmidt, Director
Division of Environment

Bureau of Water
Public Water Supply Section
Forbes Field, Building 283
Topeka, KS 66620
(785) 296-5514

<KANSAS DRINKING WATER IN 1997=

The federal Safe Drinking Water Act (**SDWA**) requires states to prepare and submit to the U.S. Environmental Protection Agency (**EPA**) an annual report on all public water supply systems, including all violations of maximum contaminant levels (**MCL**), treatment techniques, and monitoring violations deemed significant. The annual report is also to be made available to the public. The Kansas Department of Health and Environment (**KDHE**), has prepared this summary of the annual report for calendar year 1997.

In 1997, there were 1,122 public water supply systems (**PWSs**) operating in Kansas. These PWSs served an estimated 2,424,621 Kansas residents in addition to all the transient population visiting or traveling through the state on any given day.

There are three types of PWSs. Table 1 shows the three types of PWSs, the number of systems in each type, their source water, and the total population served by each PWS type.

TABLE 1

SUMMARY OF PUBLIC WATER SUPPLY SYSTEMS
IN KANSAS

TYPE OF WATER SYSTEM	GW	SW	SW/GW	TOTAL (%)	POPULATION
Community Public Water Systems	590	293	45	928 (83%)	2,399,614
Non-Community-Transient PWSs	114	6	3	120 (11%)	1,655
Non-Community-Non-transient PWSs	72	2	0	74 (6%)	23,352
TOTAL	776	301	48	1,122 (100%)	2,424,621

Regulations administered by KDHE address the following groups of drinking water contaminants:

- **TOTAL COLIFORM**
- **PHASE II/V CHEMICALS**
- **LEAD AND COPPER**
- **DISINFECTION BY-PRODUCTS**
- **SURFACE WATER TREATMENT**
- **RADIONUCLIDES**

Public water supply systems are required by regulations to monitor for the above contaminant groups at a certain minimum frequency and conform with the required maximum contaminant levels (MCLs) for those contaminants.

TOTAL COLIFORM

The **bacteriological** monitoring of 1,122 systems resulted in 10 systems having an acute MCL violation and 45 systems having a non-acute MCL violation. This resulted in a 95% of all systems being in compliance with only 5% having a violation. The population affected by these violations was 19,544 or 0.8% of the population served by all PWSs. Systems in violation for failing to sample were 61 out of 1,122, for a 94% compliance rate. The population affected by these monitoring violations was 16,231 or 0.07% of the population served by all systems.

PHASE II/V CHEMICALS

In the organic contaminant group (VOCs and SOCs), only two compounds - **benzene**, and **ethylene dibromide** (**EDB**) - caused PWSs to incur in an MCL violation. Two PWSs out of 232 monitoring incurred in these MCL violations. This translates to 99.2% of all PWSs monitoring in compliance, with only 0.8 % having a violation. The population affected by this benzene and EDB MCL violations was 1,325. Both of these PWSs are currently returned to compliance. No pesticide violations occurred during 1997.

Nitrate and **selenium** were the only inorganic contaminants detected above their MCL. **Nitrate** MCL violations occurred in 36 out of 812 systems monitoring. This translates to less than 5% of PWSs being in violation, leaving 95% of PWSs in compliance. The population affected by these nitrate violations was 38,004, or less than 2% of the total population served in Kansas.

Selenium was detected above the MCL in three of the 700 PWSs monitoring during 1997. This translates to less that 1% of the systems monitoring being in violation for selenium, leaving 99.6% in compliance. The population affected by these three selenium MCL violations was 758 or less than 0.01% of the total population served in Kansas.

LEAD AND COPPER

Lead and copper monitoring resulted in 11 systems with a monitoring violations. The number of systems monitored and reported for lead and copper was 509. Less than 3% of systems were in violation, leaving 97% in compliance. Of the systems monitored, one had a treatment installation violation, and three systems failed to perform the public education requirements. Total population affected by these violations was 16,787.

DISINFECTION BY-PRODUCTS

Disinfection by-product monitoring for TTHMs resulted in only one system having an MCL violation. No monitoring violations occurred during 1997. The total populationaffected by this violation was 13,282 persons. This system has since returned to compliance.

SURFACE WATER TREATMENT

Twenty-one systems incurred **surface water treatment** violations out of 106 surface water systems. Fourteen systems had treatment technique violations and eight systems had monitoring/reporting violations (note one system incurred both types of violations). These results place 80% of all surface water systems in compliance with surface water regulations during 1997. The total population affected by these violations was 52,535 or 2% of the total population served by all PWSs in Kansas.

RADIONUCLIDES

Radionuclide monitoring resulted in eight MCL violations of radium 226/228 occurring during 1997. These eight MCL violations where attributed to four PWSs. This is less than 1% of systems being in violation, leaving 99% in compliance. The population affected by these violations was 4,997.

SUMMARY

A total of 228 PWSs incurred a violation of some drinking water regulation during 1997. Compared to 1,122 PWSs operating during 1997, eight hundred ninety-four PWSs had no violations. This translates to 80% of Kansas PWSs having no violations of drinking water regulations during 1997.

The total population affected by all PWSs having violations was 164,457. Compared to 2,424,621 people served by all Kansas PWSs, 2,260,164 people were not affected by these violations. This translates to 93% of the Kansas population being served by PWSs in compliance with federal and state drinking water regulations.

Table 2 shows the overall general compliance rate of all PWSs with drinking water regulations for 1997.

TABLE 2.

GENERAL COMPLIANCE SUMMARY

REGULATORY PROGRAM	COMPLIANCE
Total Coliform	94%
Nitrate / Nitrite	97%
Inorganic Compounds (IOCs)	97%
Volatile Organic Compounds (VOCs)	99%
Synthetic Organic Compounds (SOCs)	99%
Total Trihalomethanes (TTHMs)	100%
Lead and Copper	97%
Surface Water Treatment	80%
Radionuclides	99%

For additional copies of this report please contact KDHE's Bureau of Water. For any questions regarding drinking water, please contact any of the following:

KANSAS DEPARTMENT OF HEALTH AND ENVIRONMENT
BUREAU OF WATER
PUBLIC WATER SUPPLY SECTION
FORBES FIELD, BUILDING 283
TOPEKA, KS 66620

Director, Division of Environment RON HAMMERSCHMIDT	(785) 296-1535
Director, Bureau of Water KARL MUELDENER	(785) 296-5500
Public Water Supply Section Chief DAVE WALDO	(785) 296-5514
Compliance and Data Management Unit Chief DARREL PLUMMER	(785) 296-5523
Engineering and Permits Unit Chief IRAJ POURMIRZA	(785) 296-5539
Bacteriological, Surface Water Treatment, Radionuclides JEAN HERROLD	(785) 296-5518
Lead and Copper, Trihalomethanes RON CRAMER	(785) 296-5946
Inorganic, Volatile, and Synthetic Compounds, Nitrate PATTI VOIERS	(785) 296-3016
Data Management CLAUDINE DUNN	(785) 296-0735
Compliance PETER ARMESTO	(785) 296-6297
Safe Drinking Water Hotline	(800) 426-4791